

New York State Department of Transportation

Yellow Flag NB23U4W005

By: Malav Shah

Flag Date: April 10, 2023

Superseding Information:

No Flags Superseded

Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

Verbal Notification Information

Person Notified: Heinz Joachim, P.E.

Date: April 10, 2023 2:00:00 PM

Of: NYSDOT Region 11

Signature Information

Signature: Malav Shah, P.E. 106620-1

Date: May 01, 2023

Reviewed By: Robert Kemp

Date: May 01, 2023

Attachments: 7

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 105			
	113 - Steel Stringer	104	ft

Flagged Condition Description

This Yellow Flag No. NB23U4W005 is a new flag.

Location: Span 105 Stringer S2 at Pier 105

Description:

Stringer S2 right face at Pier 105 exhibits heavy section loss in the web, varying from 1/8" to 3/16" over an area of 8" - 10" W x Full Height (22" H). There is a 3"L x 1/2"H hole in the lower web with up to 90% section loss in the surrounding area of 5"L x 3"H. The bottom flange angle on the right side exhibits up to 75% section loss in the outstanding leg (FW x 24"L) with three holes (7"L x 2-1/4"W, 1" diameter and 1/4" diameter) near the stringer seat. The connecting leg of the bottom flange angle on the right side exhibits up to 50% section loss (18"L x FH). The connection angle on the right face has up to 50% section loss over the full face of the connecting leg with 1/4" diameter edge hole at the base. All rivets in the connection angle and 3 rivets in the stringer seat bottom flange right angle exhibits up to 20% section loss in rivet heads. Additionally, 4 rivet heads on the connection angle on left face exhibit 50% section loss. Refer to sketch for further details.

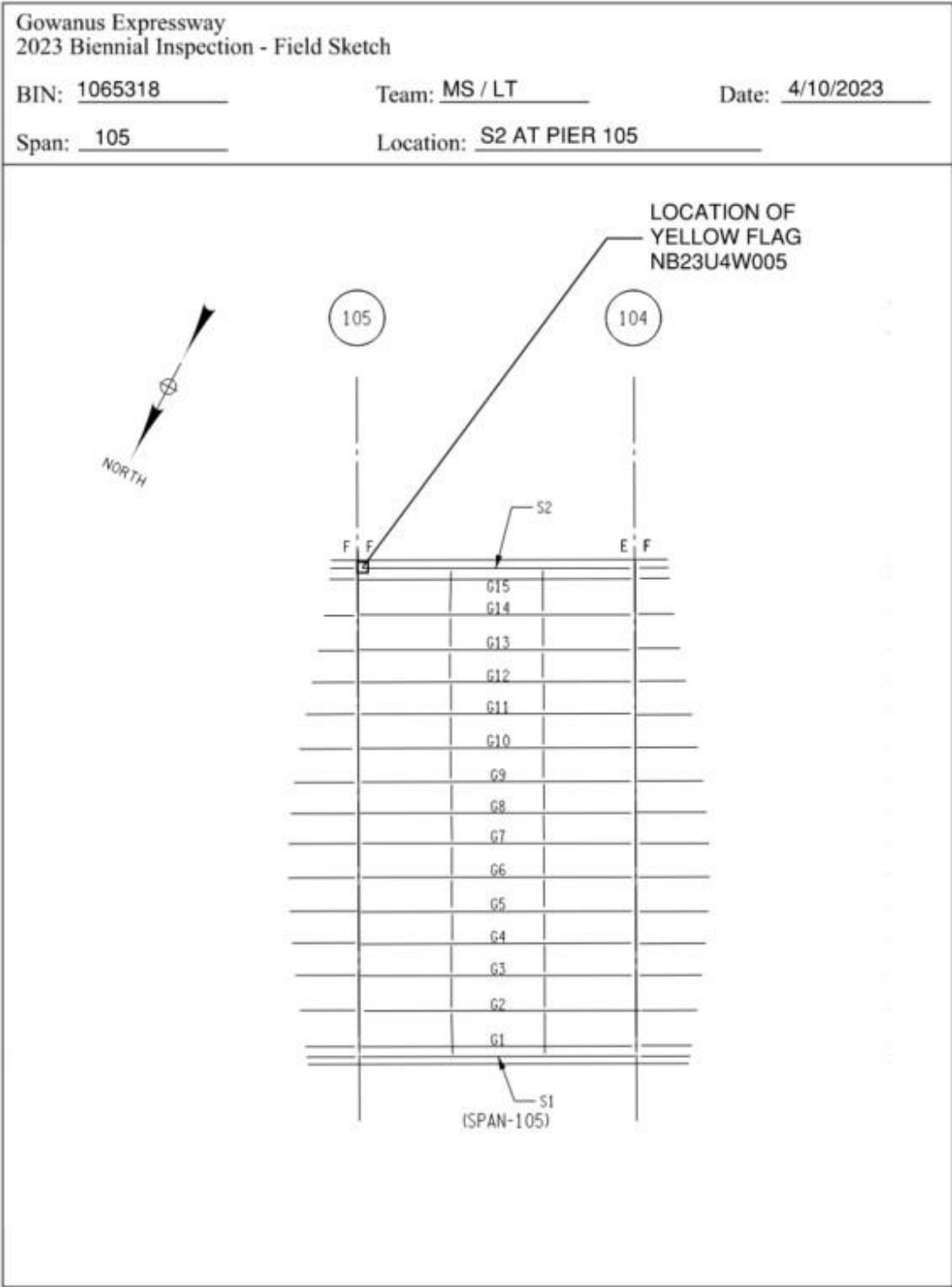
Notes:

1. Stringer S2 receives no direct live loading but supports the barrier/railing above on I278.
2. The adjacent Girder G15 has up to 1/8" section loss (6"H x 3"W) at the top cope along the connection angle in the right face of web and up to 1/8" section loss (8"H x 3"W) at the top cope on the left face of the web.
3. The flagged condition is located above the center lane on 3rd Avenue EB roadway and was accessed using 30ft bucket truck with double left lane closure.
4. The previous 2022 SILO CS3 Mini Report documented the above stringer S2 location with the following defect :

The right side of Stringer S2 exhibits a 2" to 5" W x 11" H area with 3/16"D section loss along connection angle. The bottom flange exhibits a 7"L x 2"W corrosion hole with a surrounding area exhibiting upto 30% section loss with flaking of steel. Additionally, 4 rivet heads on the connection angle exhibit 50% section loss. The left side of Stringer S2 exhibits a 3"H x 12"L area with 1/8"D section loss at the lower web and a 3"W x Full Height area with 1/8"D section loss at connection angle.

Flag Photographs

Photo Number: 1 Photo Filename: NB23U4W005 LOCATION PLAN.JPG



Attachment Description: Yellow Flag Location Plan

Photo Number: 2

Photo Filename: NB23U4W005 CONDITION SKETCH.JPG

Gowanus Expressway
2023 Biennial Inspection - Field Sketch

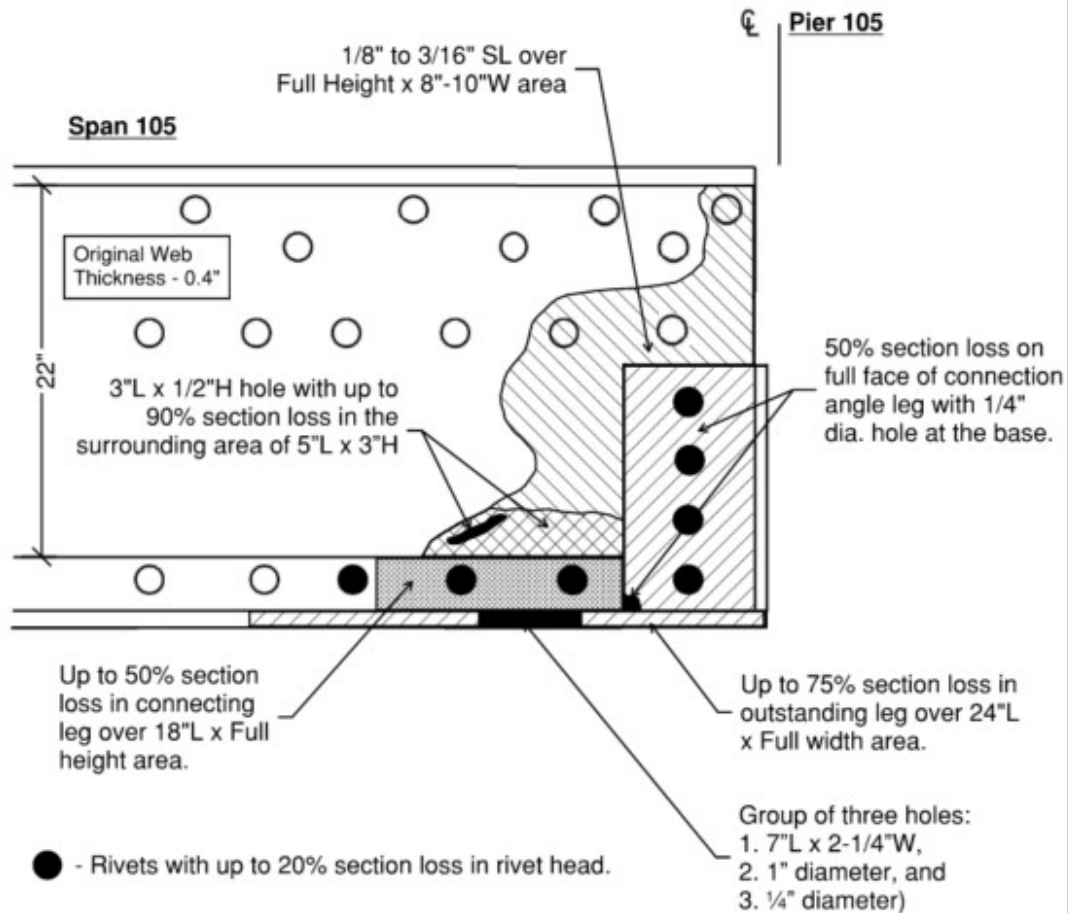
BIN: 1065318

Team: MS / LT

Date: 4/10/2023

Span: 105

Location: S2 AT PIER 105



SKETCH FOR YELLOW FLAG # NB23U4W005
SPAN 105, STRINGER S2 AT PIER 105
(LOOKING LEFT)
N.T.S

wsp

Attachment Description: Yellow Flag Condition Sketch

Photo Number: 3

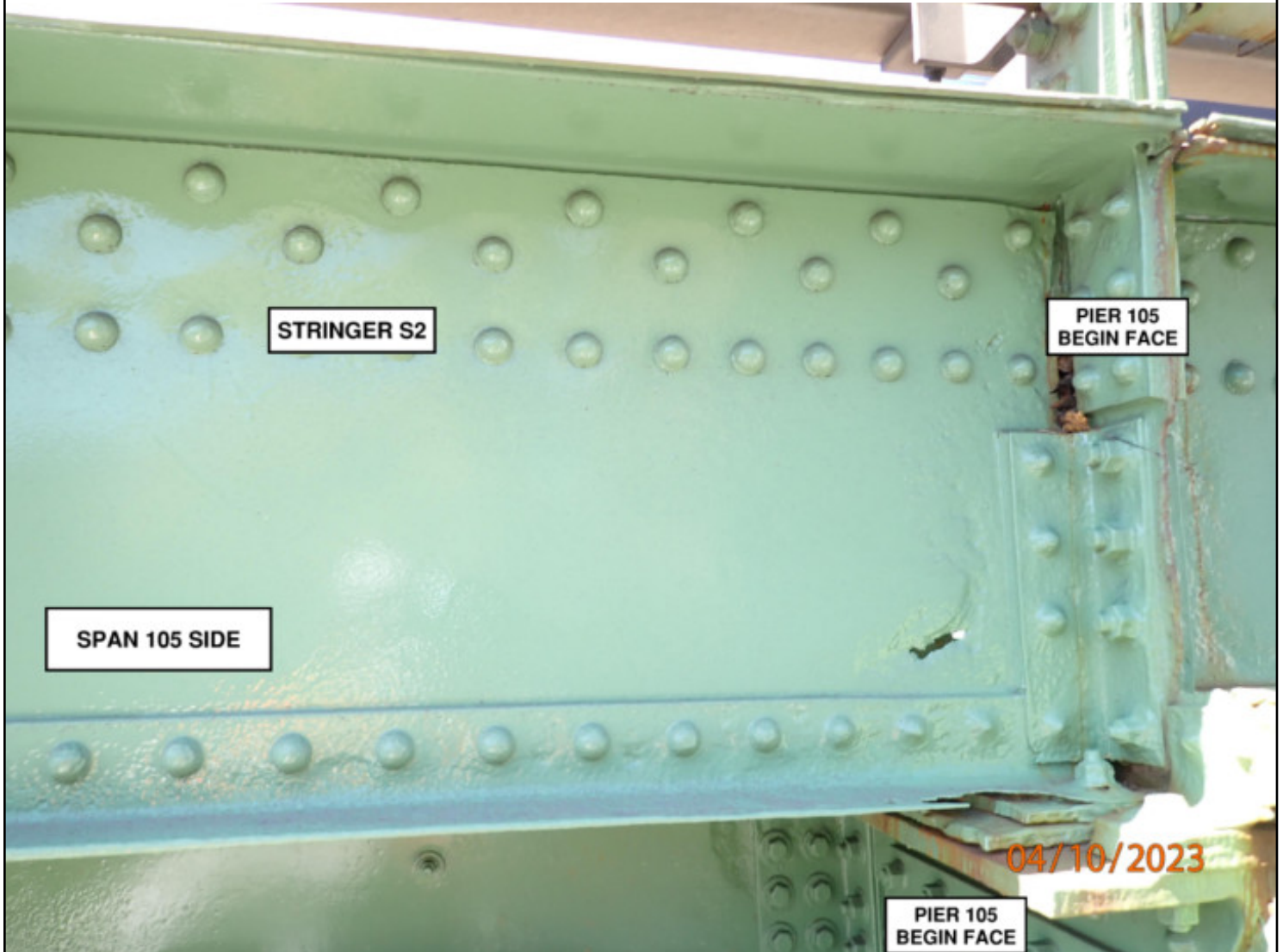
Photo Filename: P4202480.JPG



Attachment Description: General view of the flagged condition at Stringer S2 in Span 105 at Pier 105. Looking End

Photo Number: 4

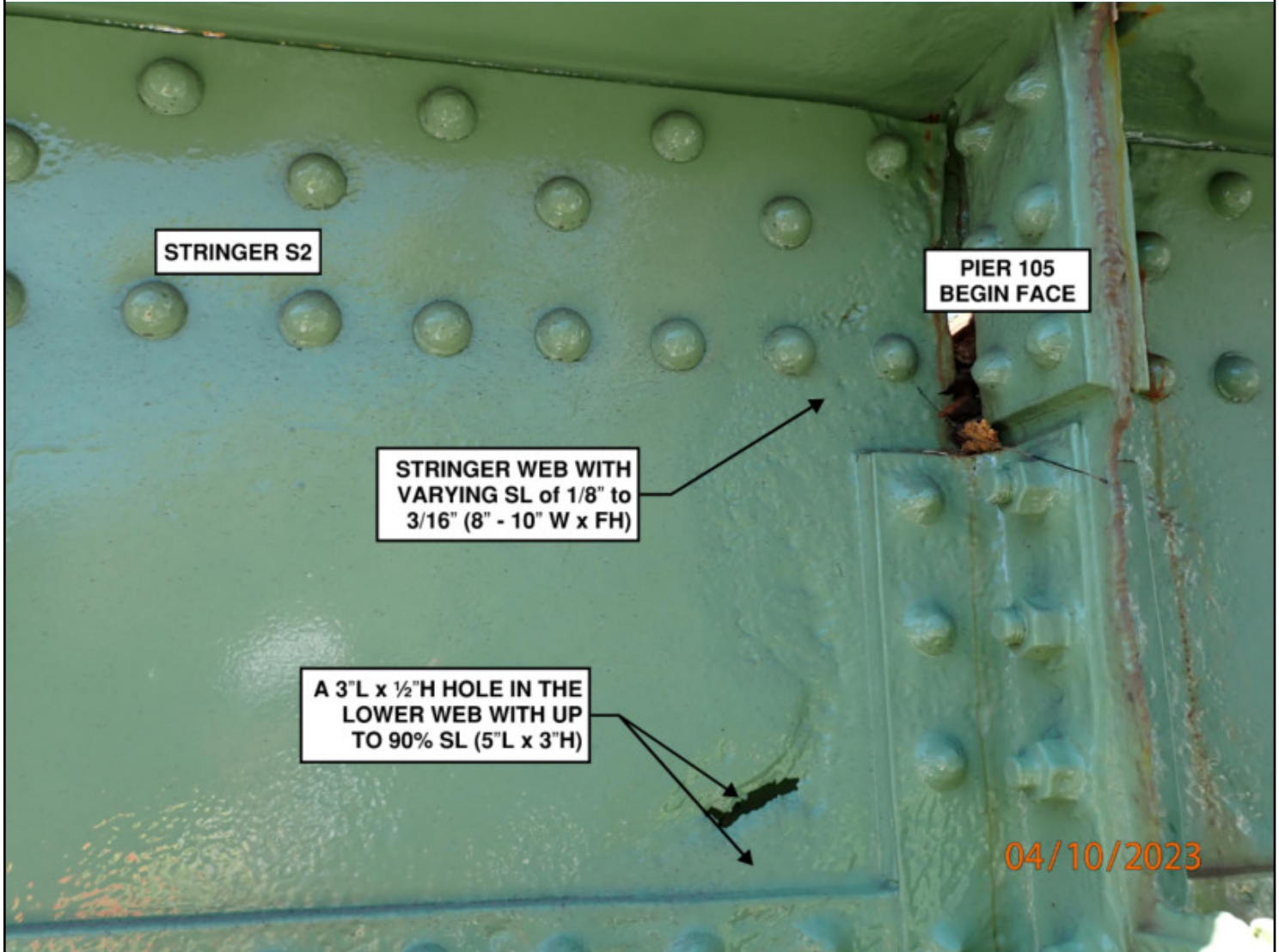
Photo Filename: P4102146.JPG



Attachment Description: General View of Stringer S2 end in Span 105 at Pier 105. Looking Left.

Photo Number: 5

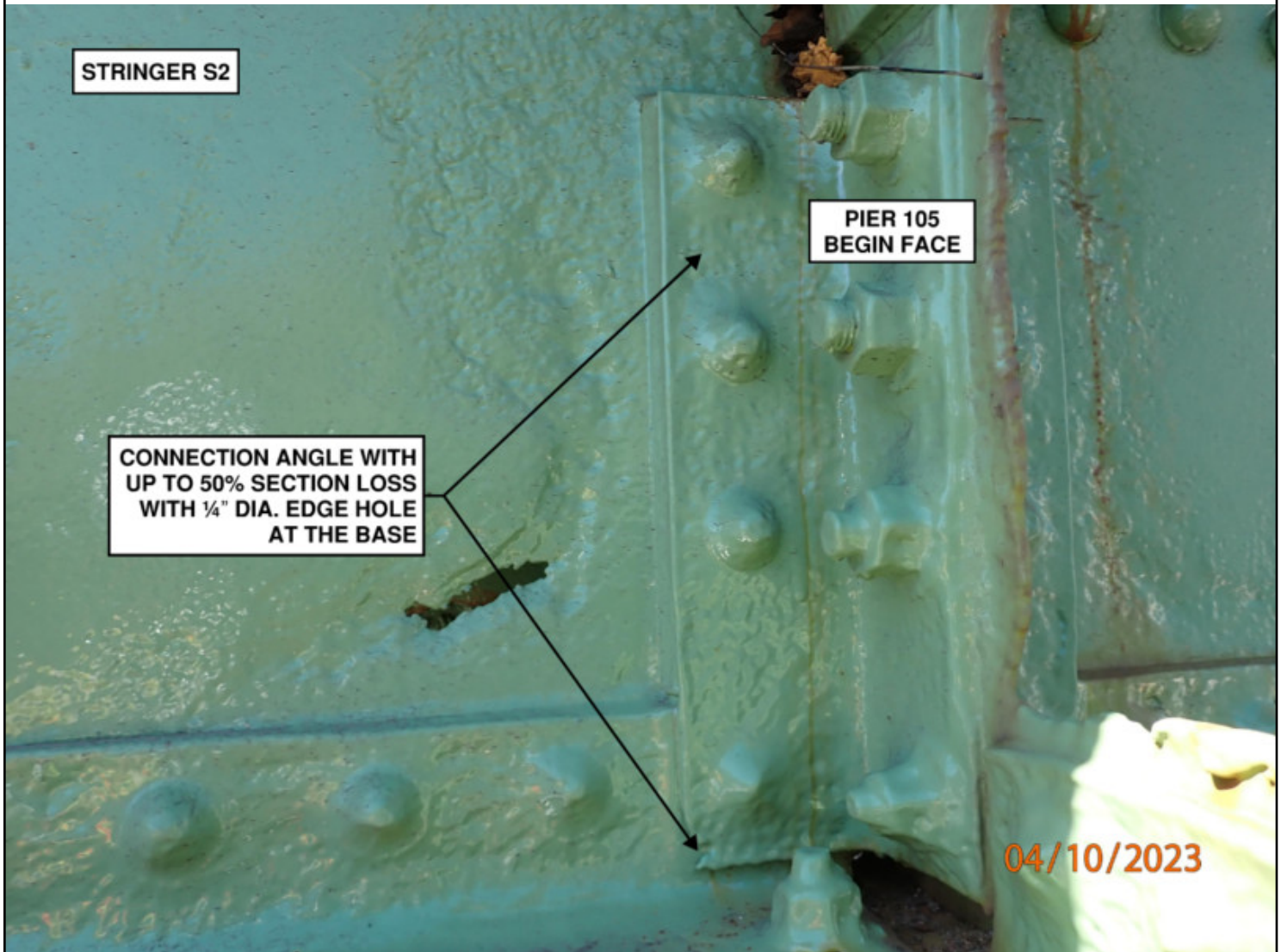
Photo Filename: P4102148.JPG



Attachment Description: Close up view of Stringer S2 web at Pier 105, with varying SL of 1/8" to 3/16" over an area of 8" - 10" W x FH (22" H) and a 3"L x 1/2"H hole in the lower web with up to 90% section loss in surrounding area of 5"L x 3"H. Looking Left.

Photo Number: 6

Photo Filename: P4102149.JPG



Attachment Description: Close up view of the connection angle of Stringer S2 to Pier 105 at the right face with up to 50% section loss over the full face of the connecting leg with 1/4" dia. edge hole at the base. Looking Left.

Photo Number: 7

Photo Filename: P4102141.JPG



Attachment Description: Close up view of the bottom flange angle on the right side with up to 75% section loss in the outstanding leg (FW x 24"L) with three holes (7"L x 2-1/4"W, 1" diameter and 1/4" diameter) near the stringer seat. The connecting leg of the bottom flange angle on the right side exhibits up to 50% section loss (18"L x FH).
Looking End - Up.